Reg. No ..... Name **20P3007**

MSc DEGREE END SEMESTER EXAMINATION - OCT/NOV 2020: JAN 2021

SEMESTER 3 : PHARMACEUTICAL CHEMISTRY

COURSE : **16P3CPHT09 : PHARMACEUTICAL CHEMISTRY - I**

(For Regular - 2019 Admission and Supplementary - 2016/2017/2018 Admissions)

Time : Three Hours Max. Marks: 75

PART A

Answer any 10 (2 marks each)

1. What do you mean by efficacy of a drug?
2. What is graded dose effect.
3. Comment on the different sites of biotransformations.
4. Find the number of rat poison pills (each pill has 1.5g of poison) needed to reach the the LD50 for a 120 pound man.(LD50=320mg/Kg)
5. Discuss the pharmacological action of clonidine.
6. Write a note on neurone blockers as antiarrhythmic agent. Explain with example
7. What are the cardinal requirements of a substance to be called as an antibiotic ?
8. Classify the antimalarials based on their basic chemical nucleus. Provide examples of at least one compound from each class.
9. Give the structure of Naproxen and Raxatrigine.
10. Give the synthesis of codeine.
11. Discuss the pharmacological action of Naproxen.
12. Prontosil doesn't have any activity in vitro. Why?
13. Outline the synthesis of Dapsone.

(2 x 10 = 20)

PART B

Answer any 5 (5 marks each)

14. Give an account of carrier proteins.
15. Explain teratogenicity and carcinogenicity.
16. How does toxic electrophile in our body eliminate by glutathione conjugation?
17. Give the mechanism of action and synthesis of fluvastatin
18. Outline the synthesis of proguanil from p-chlorophenyl guanidine. Write the MOA and side effects of proguanil
19. Discuss in detail the SAR of diphenyl heptanone and its derivatives as narcotic analgesics.
20. Discuss the synthesis, mechanism of action and uses of phenylbutazone.
21. Explain briefly the different classification of sulphonamides.

(5 x 5 = 25)

PART C

Answer any 2 (15 marks each)

22. Explain the factors affecting drug absorption.
23. Discuss the classification of antianginal drugs with examples.
24. Explain the causes and chemotherapy of MTB.
25. Write a note on various antiviral drugs. Explain their mode of action and therapeutic uses with suitable example. Outline the synthesis of acyclovir.

(15 x 2 = 30)